



SINCE - 1969

PNEUMATIC SCOTCH YOKE ACTUATOR **SYA**



Pioneer Spirit in Valve Automation

ED-SYA-07-2024.A

Office & Works Unit -I



Office & Works Unit -III



Office & Works Unit -II



Office & Works Unit -IV

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HYDERABAD

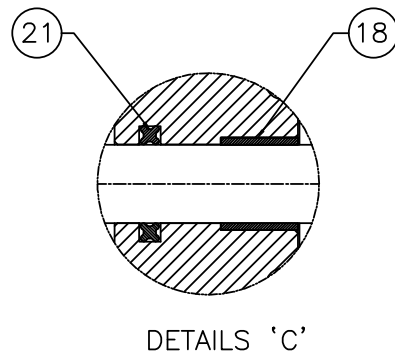
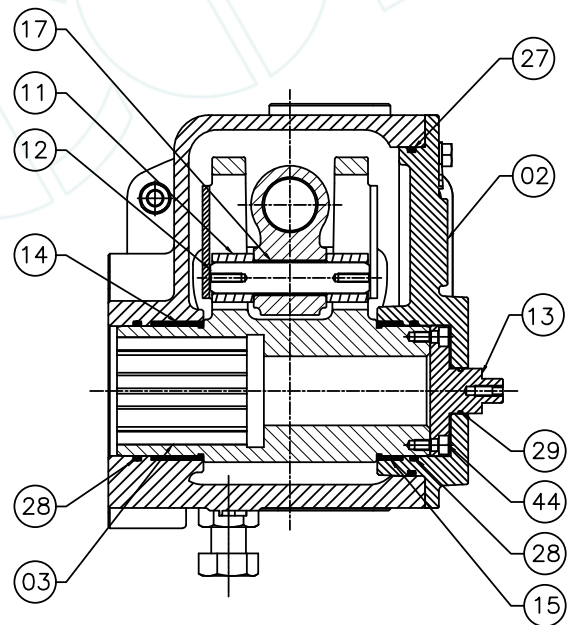
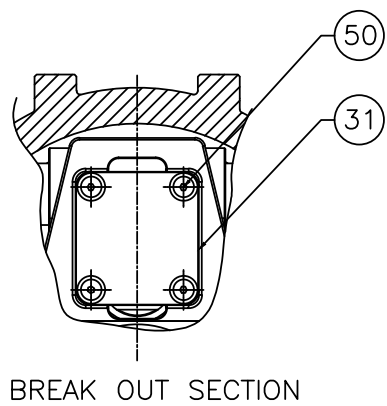
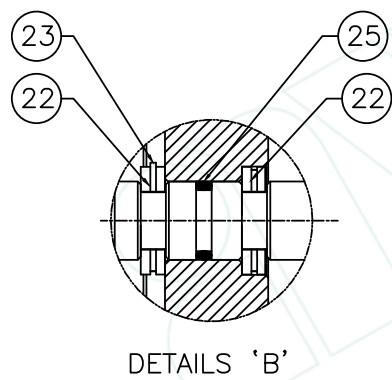
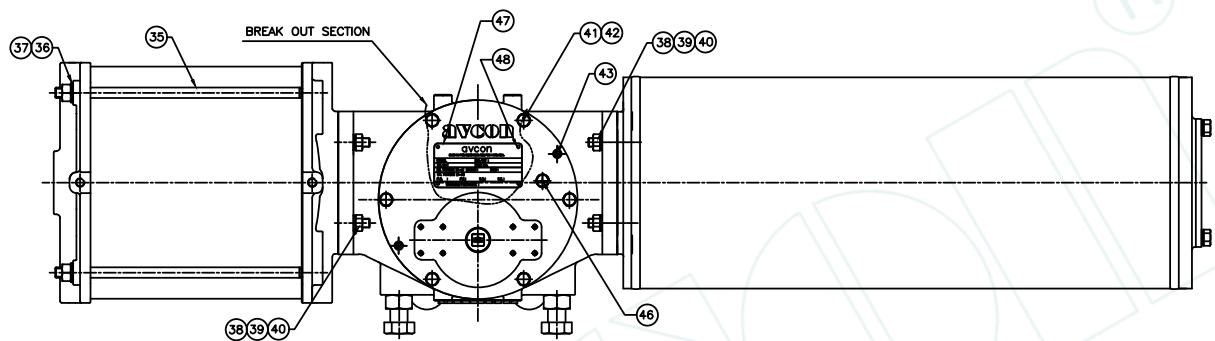
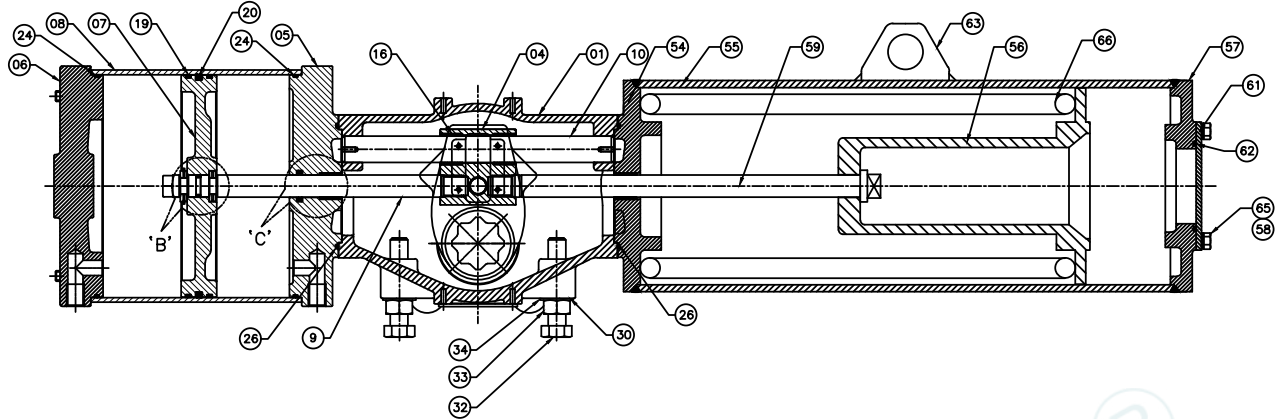
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GENERAL SPECIFICATIONS AND FEATURES

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RANGE										
Model	ISO Mounting Base	Rated Torque		Spring End Torque Nm		Spring End Torque Lb-in		Maximum Stem Acceptance Diameters		Maximum Stem Height
		Nm	Lb-in	Min.	Max	Min.	Max	mm	in	mm
SYA-040	F10/F12	1250	11062	290	625	2566.5	5531.25	36	1.4	30
SYA-050	F10/F14	1800	15930	530	875	4690.5	7743.75	50	1.4	65
SYA-065	F12/16	5600	49560	1010	2382	8938.5	21080.7	58	1.8	75
SYA-075	F12/F16	8400	74340	2164	3459	19151.4	30612.15	65	1.8	75
SYA-100	F16/F25	17000	150450	3488	7094	30868.8	62781.9	90	2.2	125
SYA-125	F25/F30	23500	207998	6500	11000	57531.5	97361	130	4.5	128
SYA-150	F30/F35	45000	398284	11000	18000	97361	159313	160	6.1	165
CONFIGURATIONS										
DA		Double Acting - Spring Cylinder								
DD		Double Acting - Double Cylinder								
SR-CW		Spring Return - Fail CW								
SR-CCW		Spring Return - Fail CCW								
OPERATION CONDITION										
Pressure Range		40-150 PSI(2.75 Bar- 10 Bar.)								
Media		Dry Compressed Air								
Temperature Range Standard Option		Standard :- -20 °F to 200°F (-29°C to 90°C)								
		High Temp. :-Up to 300°F (149°C)								
		Low Temp. :-Down to -50°F (-46°C)								
COMPLIANCE										
Torque Base		Valve mounting dimension as per ISO 5211								
Accessories		Accessories mounting as per NAMUR -VDI/VDE								
Testing		In accordance with EN 15714-3								

MATERIAL OF CONSTRUCTION- STANDARD ACTUATOR

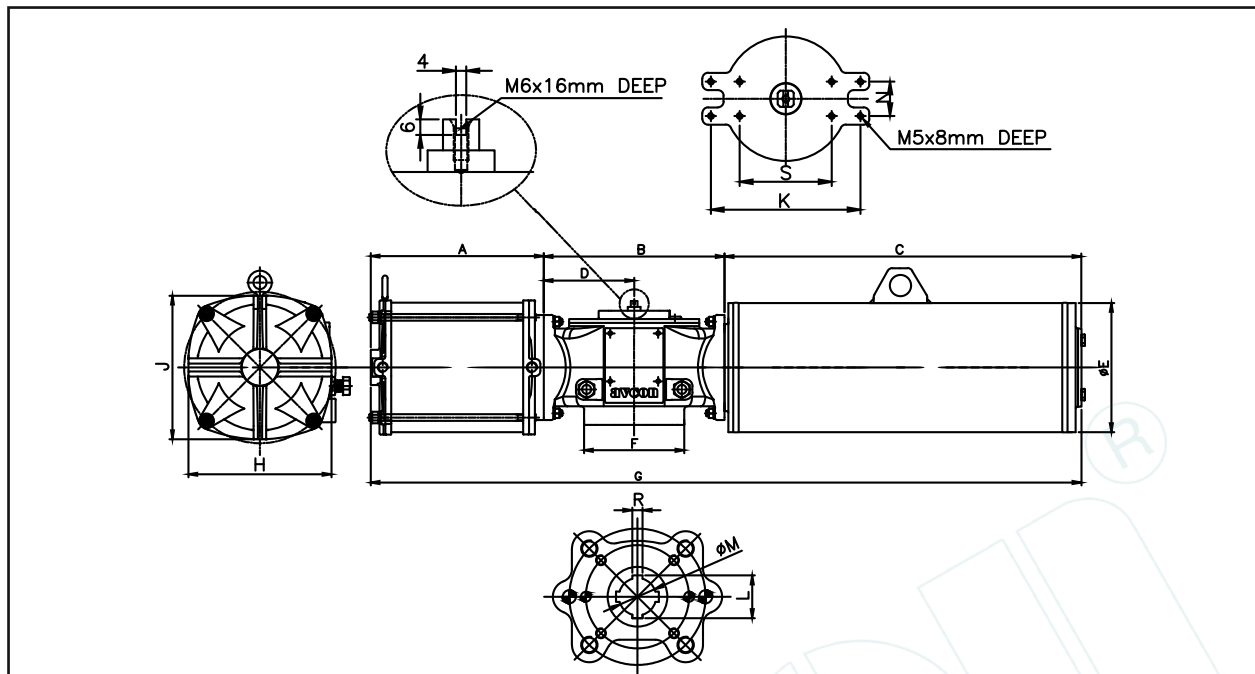


MATERIAL OF CONSTRUCTION- STANDARD SYA ACTUATOR

ITEM	DESCRIPTION	MATERIAL		ITEM	DESCRIPTION	MATERIAL	
1	HOUSING	DUCTILE IRON / CS / SS		34	M/C WASHER	STAINLESS STEEL	
2	TOP COVER	DUCTILE IRON / CS / SS		35	TIE ROD	ASTM A 193 Gr.B7	##
3	YOKE	DUCTILE IRON / CS / SS		36	NUT FOR TIE ROD	ASTM A 194 Gr.2H	
4	GUIDE BLOCK	DUCTILE IRON / CS / SS		37	SPRING WASHER	STAINLESS STEEL	
5	RIGHT END PLATE	DUCTILE IRON / CS / SS		38	STUD FOR HG	ASTM A 193 Gr.B7	
6	LEFT END PLATE	DUCTILE IRON / CS / SS		39	NUT FOR HG	ASTM A 194 Gr.2H	
7	PISTON	DUCTILE IRON / CS / SS		40	SPRING WASHER HG	STAINLESS STEEL	
8	CYLINDER	ASTA A106 Gr.B		41	HEX. BOLT FOR TOP COVER	ASTM A 193 Gr.B7	
9	PISTON ROD	En24		42	SPRING WASHER	STAINLESS STEEL	
10	GUIDE ROD	En24		43	DOWEL PIN	CARBON STEEL	
11	SLIDER BLOCK	NICKEL BRONZE	##	44	ALLEN BOLT	ASTM A 193 Gr.B7	
12	YOKE PIN	En24		45	GREASE PLUG	STAINLESS STEEL	
13	INDICATOR PLATE	En24		46	COUNTER SUNK SCREW	STAINLESS STEEL	
14	DU BEARING FOR BHG	MS + PTFE	##	47	NAME PLATE	STAINLESS STEEL	
15	DU BEARING FOR TC	MS + PTFE	##	48	RIVET	MS	
16	DU BEARING FOR GB	MS + PTFE	##	49	AVCON LABLE	PVC	
17	DU BEARING FOR YP	MS + PTFE	##	50	INLET LABLE	PVC	
18	DU BEARING FOR RH	MS + PTFE	##	51	OUTLET LABLE	PVC	
19	PISTON BEARING	MOS2+NYLON6	#	52	CAUTION LABLE	PVC	
20	QUAD SEAL	NITRILE / VITON / SILICON	#	53	PRESSURE CAUTION LABLE	PVC	
21	QUAD SEAL FOR RH	NITRILE / VITON / SILICON	#	54	LEFT END PLATE	DUCTILE IRON / CS / SS	
22	SPLIT COLLAR	STAINLESS STEEL		55	CYLINDER FOR SC	MS / CS / SS	
23	EXTERNAL CIRCLE	STAINLESS STEEL		56	SPRING CAP	DUCTILE IRON / CS / SS	
24	'O'-RING FOR LH & RHP	NITRILE / VITON / SILICON	#	57	RIGHT END PLATE	DUCTILE IRON / CS / SS	
25	'O'-RING FOR PR	NITRILE / VITON / SILICON	#	58	WASHER	STAINLESS STEEL	
26	'O'-RING FOR HG	NITRILE / VITON / SILICON	#	59	SPRING ROD	En24 / SS	##
27	'O'-RING FOR TOP COVER	NITRILE / VITON / SILICON	#	60	SPRING CAP BEARING	PLASTIC	
28	'O'-RING FOR YOKE	NITRILE / VITON / SILICON	#	61	BLIND END PLATE	MS	
29	'O'-RING FOR IP	NITRILE / VITON / SILICON	#	62	'O'-RING FOR BE	NITRILE	#
30	'O'-RING FOR SB	NITRILE / VITON / SILICON	#	63	LIFTING LUG	MS	
31	PLASTIC COVER FOR YP	PLASTIC		64	"C" TYPE EXTERENT CIRCLIP	SS	
32	STROKE BOLT	ASTM A 193 Gr.B7		65	BLIND END PLATE BOLT	ASTM A 193 Gr.B7	
33	STROKE NUT	ASTM A 194 Gr.2H		66	"A" SPRING	En47 -50CrV4	

#	Parts in Seal Kits
##	Parts in Repair Kits

OVER ALL MAXIMUM DIMENSIONS OF ACTUATOR



SERIES SYA MAX DIMENSIONS, mm

Model	A	B	C	D	ØE	F	G	H	J	L	ØM	R	S	K	N	ISO MOUNTING DETAILS		
																PCD	HOLES THRED	NO. OF HOLES
SYA-040	259	248	491	124	180	148	998	153	153	43	36	10	80	130	30	F10/F12	M10/M12	4
SYA-050	308	272	676	136	241	131	1256	275	275	49	42	12	80	130	30	F10/F14	M10/M14	4
SYA-065	325	318	693	159	247	205	1336	315	315	58	50	14	80	130	30	F12/16	M12/M20	4
SYA-075	354	370	730	185	265	205	1454	325	325	58	50	14	80	130	30	F12/F16	M12/M20	4
SYA-100	547	593	1047	296	379	300	2187	365	365	82	72	20	80	130	30	F16/F25	M20/M16	4 & 8
SYA-125	634	643	1190	321	407	352	2467	630	630	129	114	32	-	130	30	F25/F30	M16/M20	8
SYA-150	665	740	1518	370	480	420	2962	732	732	174	155	40	-	130	30	F30/F35	M20/M30	8

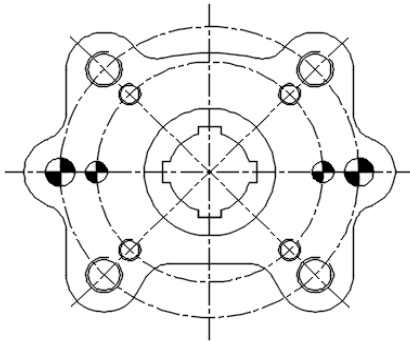
SERIES SYA MAX DIMENSIONS, Inch

Model	A	B	C	D	ØE	F	G	H	J	L	ØM	R	S	K	N	ISO MOUNTING DETAILS		
																PCD	HOLES THRED	NO. OF HOLES
SYA-040	10.20	9.76	19.33	4.88	7.08	5.83	39.29	6.02	6.02	1.69	1.42	0.39	3.15	5.12	1.18	F10/F12	M10/M12	4
SYA-050	12.13	10.71	26.61	5.35	9.46	5.16	49.45	10.83	10.83	1.93	1.65	0.47	3.15	5.12	1.18	F10/F14	M10/M14	4
SYA-065	12.80	12.52	27.28	6.26	9.69	8.07	52.60	12.40	12.40	2.28	1.97	0.55	3.15	5.12	1.18	F12/16	M12/M20	4
SYA-075	13.94	14.57	28.74	7.28	10.40	8.07	57.24	12.80	12.80	2.28	1.97	0.55	3.15	5.12	1.18	F12/F16	M12/M20	4
SYA-100	21.54	23.35	41.22	11.65	14.88	11.81	86.10	14.37	14.37	3.23	2.83	0.79	3.15	5.12	1.18	F16/F25	M20/M16	4 & 8
SYA-125	24.96	25.31	46.85	12.64	15.98	13.86	97.13	24.80	24.80	5.08	4.49	1.26	-	5.12	1.18	F25/F30	M16/M20	8
SYA-150	26.18	29.13	59.76	14.57	18.84	16.54	116.61	28.82	28.82	6.85	6.10	1.57	-	5.12	1.18	F30/F35	M20/M30	8

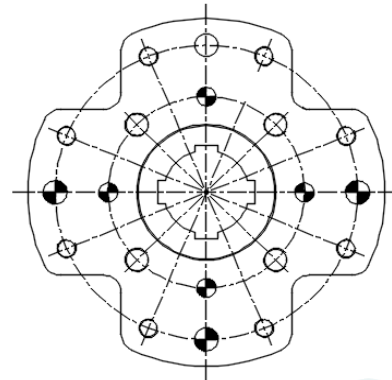
CYLINDER PORT SIZE

Cylinder Size	UP TO 5"	6" - 9"	10"	12 - 16"	18" - 24"	28" - 36"
Ports, NPT	1/4"	3/8"	1/2"	3/4"	1"	1.5"

MOUNTING DETAILS - DIMENSIONS



SYA-040, SYA-050, SYA-065 & SYA-075



SYA-100, SYA-125 & SYA-150

MODEL	MAX STEM HEIGHT	OUTER BOLTING PATTERN						INTERNAL BOLTING PATTERN					
		ISO BASE	THREAD SIZE	BOLT CIRCLE	NO OF BOLT HOLES	DOWEL HOLE SIZE	NO OF DOWEL HOLES	ISO BASE	TAPPED HOLE	BOLT CIRCLE	NO OF TAPPED HOLES	DOWEL	NO OF DOWEL HOLES
SYA-040	30	F12	M12 X 18mm	125	4	15.+0.08-0.0 X 15mm	2	F10	M10 X 15mm	102	4	10 +0.018/0 X 10mm	2
SYA-050	65	F14	M12 X 18mm	140	4	15.+0.08-0.0 X 15mm	2	F10	M10 X 15mm	102	4	10 +0.018/0 X 10mm	2
SYA-065	75	F16	M20 X 30mm	165	4	16.1 +0.05/0 X 15mm	2	F12	M12 X 18mm	125	4	12.1 +0.05/0 X 13mm	2
SYA-075	75	F16	M20 X 30mm	165	4	16.1 +0.05/0 X 15mm	2	F12	M12 X 18mm	125	4	12.1 +0.05/0 X 13mm	2
SYA-100	125	F25	M16 X 24mm	254	8	20.1 +0.05/0 X 17.5mm	4	F16	M20 X 30mm	165	4	16.1 +0.05/0 X 15mm	4
SYA-125	128	F30	M20 X 30mm	298	8	20+0.018/0 X 30mm	4	F25	M16 X 24mm	254	8	16 +0.018/0 X 24mm	4
SYA-150	165	F35	M30 X 45mm	356	8	30+0.021/0 X 450mm	4	F30	M20 X 30mm	298	8	20+0.018/0 X 30mm	4

Dimensions Bore

MODEL	Ket & Bore Dimention			
	DRIVE	Bore Dia. (max)	Bore Dia. TOL	Key Size
SYA-040	KEY & BORE	36	+0.10/+0.20	10 x 8
SYA-050	KEY & BORE	50	+0.10/+0.20	14 x 9
SYA-065	KEY & BORE	58	+0.10/+0.20	16 x 10
SYA-075	KEY & BORE	65	+0.10/+0.20	18 x 11
SYA-100	KEY & BORE	90	+0.10/+0.20	25 x 14
SYA-125	KEY & BORE	130	+0.10/+0.20	36 x 20
SYA-150	KEY & BORE	160	+0.10/+0.20	40 x 22

SYA Series - Double Acting Torque

ACTUATOR											
SINGLE CYLINDER	Position	3	3.5	4	4.5	5	5.5	6	7	8	10
SYA-040-05	START	279	325	371	418	464	511	557	650	743	928
	RUN	139	162	186	209	232	255	278	325	371	464
	END	287	334	382	430	478	526	573	669	765	956
SYA-040-06	START	389	454	519	583	648	713	778	908	1037	
	RUN	194	227	259	292	324	357	389	454	519	
	END	397	463	530	596	662	728	794	927	1059	
SYA-040-07	START	529	618	706	794	882	971	1059	1235		
	RUN	265	309	353	397	441	485	529	618		
	END	538	627	717	806	896	986	1075	1254		
SYA-040-08	START	691	806	921	1037	1152	1267	1382			
	RUN	345	403	461	518	576	633	691			
	END	699	816	932	1049	1165	1282	1398			
SYA-040-09	START	851	992	1134	1276						
	RUN	425	496	567	638						
	END	859	1002	1145	1288						
SYA-050-06	START	492	574	656	738	820	902	984	1148	1313	1641
	RUN	246	287	328	369	410	451	492	574	657	821
	END	506	591	675	759	844	928	1012	1181	1350	1687
SYA-050-07	START	671	783	895	1007	1119	1230	1342	1566	1790	
	RUN	336	392	448	504	559	615	671	783	895	
	END	685	799	913	1028	1142	1256	1370	1599	1827	
SYA-050-08	START	877	1023	1169	1316	1462	1608	1754	2047		
	RUN	439	512	585	658	731	804	877	1024		
	END	891	1040	1188	1337	1485	1634	1782	2079		
SYA-050-09	START	1081	1261	1441	1621	1801	1981				
	RUN	541	631	721	811	901	991				
	END	1095	1277	1460	1642	1824	2007				
SYA-050-10	START	1381	1611	1841	2072						
	RUN	691	806	921	1036						
	END	1395	1628	1860	2093						

SYA Series - Double Acting Torque

Output Torque - Nm (Newton Meters) SYMMETRIC YOKE											
DA-Double Acting											
ACTUATOR	Position	3	3.5	4	4.5	5	5.5	6	7	8	10
SINGLE CYLINDER											
SYA-065-08	START	1123	1311	1498	1685	1872	2060	2247	2621	2996	3745
	RUN	562	655	749	843	936	1030	1123	1311	1498	1872
	END	1141	1331	1522	1712	1902	2092	2283	2663	3043	3804
SYA-065-09	START	1384	1615	1846	2076	2307	2538	2768	3230	3691	4614
	RUN	692	807	923	1038	1153	1269	1384	1615	1846	2307
	END	1402	1636	1869	2103	2337	2570	2804	3271	3739	4674
SYA-065-10	START	1769	2064	2359	2653	2948	3243	3538	4127	4717	
	RUN	884	1032	1179	1327	1474	1621	1769	2064	2359	
	END	1787	2085	2382	2680	2978	3276	3574	4169	4765	
SYA-065-12	START	2558	2985	3411	3838	4264	4690	5117			
	RUN	1279	1492	1706	1919	2132	2345	2558			
	END	2576	3006	3435	3864	4294	4723	5153			
SYA-065-14	START	3090	3605	4120	4635	5150	5665				
	RUN	1545	1803	2060	2318	2575	2833				
	END	3108	3626	4144	4662	5180	5698				

SYA Series - Double Acting Torque

Output Torque - Nm (Newton Meters) SYMMETRIC YOKE								DA-Double Acting			
ACTUATOR	Position	3	3.5	4	4.5	5	5.5	6	7	8	10
SINGLE CYLINDER											
SYA-075-10	START	2049	2391	2732	3074	3415	3757	4098	4781	5465	6831
	RUN	1025	1195	1366	1537	1708	1878	2049	2391	2732	3415
	END	2082	2429	2776	3123	3470	3817	4165	4859	5553	6941
SYA-075-12	START	2969	3464	3959	4454	4949	5444	5939	6928	7918	
	RUN	1485	1732	1980	2227	2474	2722	2969	3464	3959	
	END	3002	3503	4003	4504	5004	5504	6005	7006	8006	
SYA-075-14	START	3589	4187	4785	5384	5982	6580	7178	8374		
	RUN	1795	2094	2393	2692	2991	3290	3589	4187		
	END	3622	4226	4829	5433	6037	6640	7244	8451		
SYA-075-16	START	4751	5543	6335	7126	7918	8710				
	RUN	2375	2771	3167	3563	3959	4355				
	END	4784	5581	6379	7176	7973	8771				
SYA-100-12	START	3955	4614	5273	5933	6592	7251	7910	9228	10547	13184
	RUN	1978	2307	2637	2966	3296	3625	3955	4614	5273	6592
	END	4024	4695	5366	6036	6707	7378	8049	9390	10731	13414
SYA-100-14	START	4786	5583	6381	7178	7976	8774	9571	11167	12762	15952
	RUN	2393	2792	3190	3589	3988	4387	4786	5583	6381	7976
	END	4855	5664	6473	7282	8091	8901	9710	11328	12946	16183
SYA-100-16	START	6343	7400	8457	9515	10572	11629	12686	14800	16915	
	RUN	3171	3700	4229	4757	5286	5814	6343	7400	8457	
	END	6412	7481	8550	9618	10687	11756	12824	14962	17099	
SYA-100-18	START	8117	9469	10822	12175	13528	14881	16233	18939		
	RUN	4058	4735	5411	6087	6764	7440	8117	9469		
	END	8186	9550	10915	12279	13643	15008	16372	19100		
SYA-100-20	START	10107	11791	13476	15160	16844	18529				
	RUN	5053	5895	6738	7580	8422	9264				
	END	10176	11872	13568	15264	16960	18656				

SYA Series - Double Acting Torque

Output Torque - Nm (Newton Meters) SYMMETRIC YOKE												
ACTUATOR	Position	2.5	3	3.5	4	4.5	5	5.5	6	7	8	10
SINGLE CYLINDER												
SYA125-14	START										15829	19786
	RUN										7914	9893
	END										15829	19786
SYA125-16	START								15750	18375	21000	
	RUN								7875	9187	10500	
	END								15750	18375	21000	
SYA125-18	START						16806	18486	20167	23528		
	RUN						8403	9243	10083	11764		
	END						16806	18486	20167	23528		
SYA125-20	START				16748	18842	20935	23029	25122			
	RUN				8374	9421	10467	11514	12561			
	END				16748	18842	20935	23029	25122			
SYA125-22	START		15308	17860	20411	22962	25514					
	RUN		7654	8930	10205	11481	12756					
	END		15308	17860	20411	22962	25514					
SYA125-24	START	15271	18325	21379	24433							
	RUN	7635	9162	10689	12216							
	END	15271	18325	21379	24433							
SYA150-18	START									27975	31971	39964
	RUN									13987	15985	19982
	END									27975	31971	39964
SYA150-20	START						24924	27417	29909	34894	39879	
	RUN						12462	13708	14954	17447	19939	
	END						24924	27417	29909	34894	39879	
SYA150-22	START					27363	30404	33444	36485	42565		
	RUN					13682	15202	16722	18242	21283		
	END					27363	30404	33444	36485	42565		
SYA150-24	START			25494	29137	32779	36421	40063	43705			
	RUN			12747	14568	16389	18210	20031	21852			
	END			25494	29137	32779	36421	40063	43705			
SYA150-26	START		25785	30082	34380	38677	42975					
	RUN		12892	15041	17190	19338	21487					
	END		25785	30082	34380	38677	42975					
SYA150-28	START	25033	30040	35046	40053	45059						
	RUN	12516	15020	17523	20026	22530						
	END	25033	30040	35046	40053	45059						

SYA -SR Series Spring Return Torque

Output Torque - Nm (Newton Meters) SYMMETRIC YOKE										SR-Spring Return			
ACTUATOR		Position	Spring Torque Nm	3	3.5	4	4.5	5	5.5	6	7	8	10
SINGLE CYLINDER	SPRING												
SYA-040-05	A	START	651										507
		RUN	268										196
		END	422										277
SYA-040-05	B	START	831									355	541
		RUN	339									125	218
		END	525									145	330
SYA-040-06	A	START	651							356	486	616	875
		RUN	268							121	186	250	380
		END	422							127	257	386	646
SYA-040-06	B	START	831									512	771
		RUN	339									179	309
		END	525									206	465
SYA-040-06	C	START	1183										582
		RUN	474										174
		END	715										114
SYA-040-07	A	START	651					460	549	637	813	990	1343
		RUN	268					173	217	261	349	438	614
		END	422					231	319	408	584	761	1113
SYA-040-07	B	START	831						445	534	710	886	1239
		RUN	339						146	190	278	367	543
		END	525						139	227	404	580	933
SYA-040-07	C	START	1183									697	1050
		RUN	474									231	408
		END	715									229	582
SYA-040-08	A	START	651		384	499	615	730	845	960	1190	1421	
		RUN	268		135	192	250	308	365	423	538	653	
		END	422		155	270	385	501	616	731	961	1191	
SYA-040-08	B	START	831				511	626	742	857	1087	1317	
		RUN	339				179	237	294	352	467	582	
		END	525				205	320	435	550	781	1011	
SYA-040-08	C	START	1183							667	897	1128	1588
		RUN	474							217	332	447	677
		END	715							199	429	660	1120
SYA-040-09	A	START	651	429	571	712	854	996	1138	1280	1563		
		RUN	268	157	228	299	370	441	512	582	724		
		END	422	200	341	483	625	767	909	1050	1334		
SYA-040-09	B	START	831		467	609	751	893	1034	1176	1460		
		RUN	339		157	228	299	370	441	512	653		
		END	525		161	303	445	586	728	870	1153		
SYA-040-09	C	START	1183					703	845	987	1270	1554	
		RUN	474					234	305	376	518	660	
		END	715					235	377	518	802	1086	

SYA -SR Series Spring Return Torque

Output Torque - Nm (Newton Meters) SYMMETRIC YOKE										SR-Spring Return			
ACTUATOR		Position	Spring Torque Nm	3	3.5	4	4.5	5	5.5	6	7	8	10
SINGLE CYLINDER	SPRING												
SYA-050-06	A	START	1135									658	986
		RUN	447									209	373
		END	655									178	506
SYA-050-06	B	START	1334										896
		RUN	520										301
		END	746										307
SYA-050-07	A	START	1135							688	911	1135	1583
		RUN	447							224	336	448	671
		END	655							208	432	655	1103
SYA-050-07	B	START	1334								821	1045	1492
		RUN	520								263	375	599
		END	746								232	456	904
SYA-050-07	C	START	1930										1159
		RUN	752										367
		END	1079										307
SYA-050-08	A	START	1135				661	807	954	1100	1392	1685	2270
		RUN	447				211	284	357	430	576	722	1015
		END	655				181	327	474	620	912	1205	1790
SYA-050-08	B	START	1334					717	863	1009	1301	1594	2179
		RUN	520					211	284	357	504	650	942
		END	746					128	274	421	713	1006	1590
SYA-050-08	C	START	1930								968	1261	1846
		RUN	752								271	418	710
		END	1079								117	409	994
SYA-050-09	A	START	1135		606	786	967	1147	1327	1507	1867	2228	2948
		RUN	447		183	273	363	453	544	634	814	994	1354
		END	655		126	307	487	667	847	1027	1388	1748	2469
SYA-050-09	B	START	1334			696	876	1056	1236	1416	1777	2137	2858
		RUN	520			201	291	381	471	561	741	921	1282
		END	746			107	287	468	648	828	1188	1549	2269
SYA-050-09	C	START	1930							1083	1443	1804	2524
		RUN	752							329	509	689	1049
		END	1079							232	592	952	1673
SYA-050-10	A	START	1135	726	957	1187	1417	1647	1878	2108			
		RUN	447	243	358	474	589	704	819	934			
		END	655	247	477	707	937	1168	1398	1628			
SYA-050-10	B	START	1334		866	1096	1327	1557	1787	2017	2478		
		RUN	520		286	401	516	631	746	862	1092		
		END	746		278	508	738	968	1199	1429	1889		
SYA-050-10	C	START	1930				993	1223	1454	1684	2144	2605	
		RUN	752				284	399	514	629	859	1090	
		END	1079				142	372	602	833	1293	1754	

SYA -SR Series Spring Return Torque

Output Torque - Nm (Newton Meters) SYMMETRIC YOKE										SR-Spring Return			
ACTUATOR		Position	Spring Torque Nm	3	3.5	4	4.5	5	5.5	6	7	8	10
SINGLE CYLINDER	SPRING												
SYA-065-08	A	START	1968							995	1370	1744	2493
		RUN	805							319	506	693	1068
		END	1251							279	654	1028	1777
SYA-065-08	B	START	2553									1372	2121
		RUN	1044									454	828
		END	1624									443	1192
SYA-065-09	A	START	1968					1056	1286	1517	1978	2440	3363
		RUN	805					349	464	579	810	1041	1502
		END	1251					339	570	801	1262	1723	2646
SYA-065-09	B	START	2553							1145	1606	2067	2990
		RUN	1044							340	571	801	1263
		END	1624							215	677	1138	2061
SYA-065-09	C	START	3689										2232
		RUN	1518										789
		END	2382										925
SYA-065-10	A	START	1968			1107	1402	1697	1992	2286	2876	3466	4645
		RUN	805			374	522	669	817	964	1259	1554	2143
		END	1251			391	686	980	1275	1570	2160	2749	3929
SYA-065-10	B	START	2553					1324	1619	1914	2504	3093	4273
		RUN	1044					430	577	725	1019	1314	1904
		END	1624					395	690	985	1574	2164	3343
SYA-065-10	C	START	3689								1745	2335	3514
		RUN	1518								546	841	1430
		END	2382								439	1029	2208
SYA-065-10	D	START	4662										2946
		RUN	1903										1045
		END	2951										1235
SYA-065-12	A	START	1968	1307	1733	2160	2586	3013	3439	3865	4718	5571	
		RUN	805	474	688	901	1114	1327	1540	1754	2180	2606	
		END	1251	591	1017	1444	1870	2296	2723	3149	4002	4855	
SYA-065-12	B	START	2553			1787	2214	2640	3067	3493	4346	5199	6904
		RUN	1044			661	875	1088	1301	1514	1941	2367	3220
		END	1624			858	1285	1711	2137	2564	3417	4269	5975
SYA-065-12	C	START	3689					1882	2308	2734	3587	4440	6146
		RUN	1518					614	827	1041	1467	1894	2746
		END	2382					576	1002	1428	2281	3134	4840
SYA-065-12	D	START	4662							2166	3019	3872	5578
		RUN	1903							655	1082	1508	2361
		END	2951							455	1308	2161	3867
SYA-065-14	A	START	1968	1839	2354	2869	3384	3899	4414	4929	5959		
		RUN	805	740	998	1255	1513	1770	2028	2285	2800		
		END	1251	1122	1637	2153	2668	3183	3698	4213	5243		
SYA-065-14	B	START	2553			1981	2496	3011	3526	4042	4557	5587	6617
		RUN	1044			758	1016	1273	1531	1788	2046	2561	3076
		END	1624			1052	1567	2082	2597	3112	3627	4657	5687
SYA-065-14	C	START	3689					2768	3283	3798	4828	5858	
		RUN	1518					1057	1315	1572	2087	2602	
		END	2382					1462	1977	2492	3522	4552	
SYA-065-14	D	START	4662						2715	3230	4260	5290	7350
		RUN	1903						930	1187	1702	2217	3247
		END	2951						1004	1519	2549	3579	5639

SYA -SR Series Spring Return Torque

Output Torque - Nm (Newton Meters) SYMMETRIC YOKE										SR-Spring Return			
ACTUATOR		Position	Spring Torque Nm	3	3.5	4	4.5	5	5.5	6	7	8	10
SINGLE CYLINDER	SPRING												
SYA-075-10	A	START	3808								2217	2900	4266
		RUN	1593								797	1139	1822
		END	2565								973	1656	3022
SYA-075-10	B	START	5067									2052	3418
		RUN	2120									612	1295
		END	3413									398	1764
SYA-075-10	C	START	5976										2916
		RUN	2473										943
		END	3914										854
SYA-075-10	D	START	6441										2746
		RUN	2631										784
		END	4085										390
SYA-075-12	A	START	3808					2384	2879	3374	4363	5353	7333
		RUN	1593					881	1129	1376	1871	2366	3356
		END	2565					1141	1635	2130	3120	4110	6089
SYA-075-12	B	START	5067						2031	2526	3516	4506	6485
		RUN	2120						602	849	1344	1839	2829
		END	3413						377	872	1862	2851	4831
SYA-075-12	C	START	5976									4004	5983
		RUN	2473									1486	2476
		END	3914									1942	3921
SYA-075-12	D	START	6441										5813
		RUN	2631										2317
		END	4085										3457
SYA-075-14	A	START	3808					3417	4015	4613	5809	7006	9398
		RUN	1593					1398	1697	1996	2594	3192	4388
		END	2565					2173	2772	3370	4566	5762	8155
SYA-075-14	B	START	5067						3167	3765	4962	6158	8551
		RUN	2120						1170	1469	2067	2666	3862
		END	3413						1513	2111	3307	4504	6897
SYA-075-14	C	START	5976							3264	4460	5656	8049
		RUN	2473							1116	1715	2313	3509
		END	3914							1202	2398	3594	5987
SYA-075-14	D	START	6441								4289	5486	7878
		RUN	2631								1556	2154	3350
		END	4085								1934	3130	5523
SYA-075-16	A	START	3808	2186	2978	3770	4561	5353	6145	6937	8521	10104	
		RUN	1593	782	1178	1574	1970	2366	2762	3158	3949	4741	
		END	2565	943	1734	2526	3318	4110	4902	5694	7277	8861	
SYA-075-16	B	START	5067			2922	3714	4506	5297	6089	7673	9257	
		RUN	2120			1047	1443	1839	2235	2631	3423	4215	
		END	3413			1268	2060	2851	3643	4435	6019	7602	
SYA-075-16	C	START	5976					4004	4796	5587	7171	8755	
		RUN	2473					1486	1882	2278	3070	3862	
		END	3914					1942	2734	3526	5109	6693	
SYA-075-16	D	START	6441					3833	4625	5417	7000	8584	
		RUN	2631					1328	1724	2119	2911	3703	
		END	4085					1477	2269	3061	4645	6228	

SYA -SR Series Spring Return Torque

Output Torque - Nm (Newton Meters) SYMMETRIC YOKE										SR-Spring Return			
ACTUATOR		Position	Spring Torque Nm	3	3.5	4	4.5	5	5.5	6	7	8	10
SINGLE CYLINDER	SPRING												
SYA-100-12	A	START	6901								4928	6246	8883
		RUN	2800								1814	2473	3791
		END	4301								2328	3646	6283
SYA-100-12	B	START	7814									5732	8369
		RUN	3157									2116	3435
		END	4815									2733	5370
SYA-100-12	C	START	9448									4562	7199
		RUN	3858									1415	2733
		END	5985									1098	3735
SYA-100-14	A	START	6901						4473	5270	6866	8461	11651
		RUN	2800						1586	1985	2783	3580	5176
		END	4301						1873	2671	4266	5861	9052
SYA-100-14	B	START	7814							4757	6352	7947	11138
		RUN	3157							1629	2426	3224	4819
		END	4815							1757	3353	4948	8138
SYA-100-14	C	START	9448								5182	6777	9968
		RUN	3858								1725	2523	4118
		END	5985								1718	3313	6504
SYA-100-14	D	START	13124										7206
		RUN	5468										2508
		END	8746										2828
SYA-100-16	A	START	6901				5214	6271	7328	8385	10500	12614	16843
		RUN	2800				1957	2485	3014	3543	4600	5657	7771
		END	4301				2614	3671	4728	5785	7900	10014	14243
SYA-100-16	B	START	7814					5757	6814	7871	9986	12100	16329
		RUN	3157					2129	2657	3186	4243	5300	7415
		END	4815					2758	3815	4872	6986	9101	13330
SYA-100-16	C	START	9448						5644	6701	8816	10930	15159
		RUN	3858						1956	2485	3542	4599	6713
		END	5985						2181	3238	5352	7466	11695
SYA-100-16	D	START	13124										8169
		RUN	5468										2990
		END	8746										3790
SYA-100-18	A	START	6901	3816	5169	6521	7874	9227	10580	11933	14638	17344	
		RUN	2800	1258	1934	2611	3287	3963	4640	5316	6669	8022	
		END	4301	1216	2569	3922	5274	6627	7980	9333	12038	14744	
SYA-100-18	B	START	7814			6008	7360	8713	10066	11419	14124	16830	
		RUN	3157			2254	2930	3607	4283	4960	6312	7665	
		END	4815			3008	4361	5714	7067	8419	11125	13831	
SYA-100-18	C	START	9448					7543	8896	10249	12954	15660	21071
		RUN	3858					2906	3582	4258	5611	6964	9669
		END	5985					4079	5432	6785	9491	12196	17607
SYA-100-18	D	START	13124								7488	10193	12899
		RUN	5468								2649	4002	5355
		END	8746								3109	5815	8520
SYA-100-20	A	START	6901	5806	7490	9175	10859	12544	14228	15912	19281		
		RUN	2800	2253	3095	3937	4780	5622	6464	7306	8991		
		END	4301	3206	4890	6575	8259	9944	11628	13313	16682		
SYA-100-20	B	START	7814	5292	6977	8661	10345	12030	13714	15399	18768		
		RUN	3157	1896	2738	3581	4423	5265	6107	6949	8634		
		END	4815	2293	3977	5662	7346	9031	10715	12399	15768		
SYA-100-20	C	START	9448		5806	7491	9175	10860	12544	14229	17598	20966	
		RUN	3858		2037	2879	3722	4564	5406	6248	7933	9617	
		END	5985		2343	4027	5712	7396	9081	10765	14134	17503	
SYA-100-20	D	START	13124				6414	8099	9783	11467	14836	18205	
		RUN	5468				2112	2955	3797	4639	6323	8008	
		END	8746				2036	3720	5404	7089	10458	13827	

SYA -SR Series Spring Return Torque

Output Torque - Nm (Newton Meters) SYMMETRIC YOKE

ACTUATOR		Position	Spring Torque Nm	3	3.5	4	4.5	5	5.5	6	7	8	10
SINGLE CYLINDER	SPRING												
SYA125-14	A	START	12416								6690	8669	12626
		RUN	4894								2031	3020	4999
		END	7160								1434	3413	7370
SYA125-14	B	START	13854									8148	12106
		RUN	5383									2531	4509
		END	7681									1975	5932
SYA125-16	A	START	12416					5965	7277	8590	11215	13840	19090
		RUN	4894					1668	2325	2981	4293	5606	8231
		END	7160					709	2021	3334	5959	8584	13834
SYA125-16	B	START	13854						6757	8069	10694	13319	18569
		RUN	5383						1835	2491	3804	5116	7741
		END	7681						583	1896	4521	7146	12396
SYA125-16	C	START	17021								8873	11498	16748
		RUN	6631								2556	3869	6494
		END	9502								1354	3979	9229
SYA125-18	A	START	12416			6285	7965	9646	11326	13007	16368	19729	
		RUN	4894			1828	2668	3509	4349	5189	6870	8550	
		END	7160			1028	2709	4389	6070	7750	11112	14473	
SYA125-18	B	START	13854				7445	9125	10806	12486	15847	19209	
		RUN	5383				2179	3019	3859	4700	6380	8061	
		END	7681				1271	2952	4632	6313	9674	13035	
SYA125-18	C	START	17021						8984	10665	14026	17387	24109
		RUN	6631						2612	3452	5133	6813	10174
		END	9502						1465	3145	6507	9868	16590
SYA125-18	D	START	20577								12454	15815	22537
		RUN	7913								3851	5531	8892
		END	11074								2951	6312	13034
SYA125-20	A	START	12416	5401	7495	9588	11682	13775	15869	17962	22150		
		RUN	4894	1386	2433	3480	4527	5573	6620	7667	9760		
		END	7160	145	2238	4332	6425	8519	10612	12706	16893		
SYA125-20	B	START	13854		6974	9068	11161	13255	15348	17442	21629		
		RUN	5383		1944	2990	4037	5084	6131	7177	9271		
		END	7681		801	2894	4988	7081	9175	11268	15455		
SYA125-20	C	START	17021				9339	11433	13527	15620	19807	23994	
		RUN	6631				2790	3837	4883	5930	8024	10117	
		END	9502				1820	3914	6007	8101	12288	16475	
SYA125-20	D	START	20577					9861	11954	14048	18235	22422	
		RUN	7913					2555	3601	4648	6742	8835	
		END	11074					358	2451	4545	8732	12919	
SYA125-22	A	START	12416	8148	10700	13251	15802	18354	20905	23457			
		RUN	4894	2760	4036	5311	6587	7863	9138	10414			
		END	7160	2892	5443	7995	10546	13097	15649	18200			
SYA125-22	B	START	13854	7628	10179	12731	15282	17833	20385	22936			
		RUN	5383	2270	3546	4822	6097	7373	8649	9924			
		END	7681	1454	4006	6557	9108	11660	14211	16763			
SYA125-22	C	START	17021		8357	10909	13460	16012	18563	21114			
		RUN	6631		2299	3574	4850	6126	7401	8677			
		END	9502		838	3390	5941	8492	11044	13595			
SYA125-22	D	START	20577				11888	14439	16991	19542	24645		
		RUN	7913				3568	4844	6119	7395	9946		
		END	11074				2385	4936	7488	10039	15142		
SYA125-24	A	START	12416	11165	14219	17273	20327	23381					
		RUN	4894	4268	5795	7322	8849	10376					
		END	7160	5908	8962	12017	15071	18125					
SYA125-24	B	START	13854	10644	13698	16752	19807	22861					
		RUN	5383	3779	5306	6833	8360	9887					
		END	7681	4471	7525	10579	13633	16687					
SYA125-24	C	START	17021	8822	11877	14931	17985	21039	24093				
		RUN	6631	2531	4058	5585	7112	8639	10166				
		END	9502	1303	4357	7411	10466	13520	16574				
SYA125-24	D	START	20577		10304	13358	16413	19467	22521				
		RUN	7913		2776	4303	5830	7357	8884				
		END	11074		801	3855	6910	9964	13018				

SYA -SR Series Spring Return Torque

Output Torque - Nm (Newton Meters) SYMMETRIC YOKE

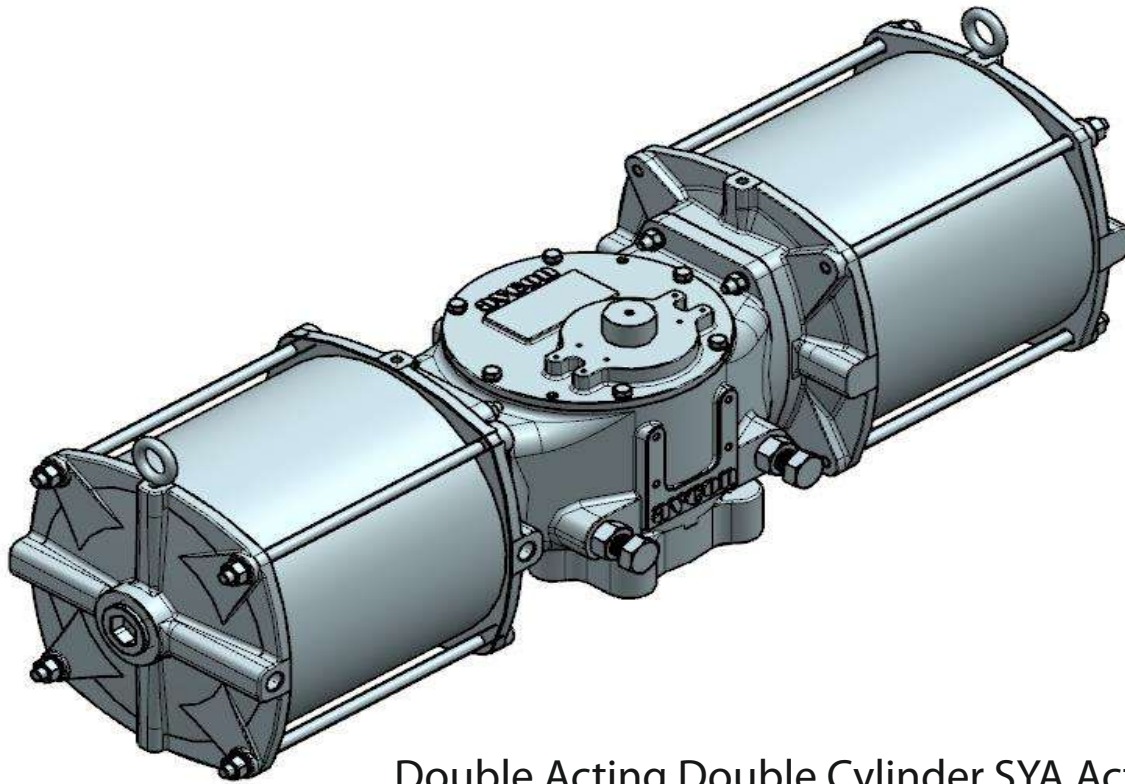
ACTUATOR		Position	Spring Torque Nm	3	3.5	4	4.5	5	5.5	6	7	8	10
SINGLE CYLINDER	SPRING												
SYA150-18	A	START	18454						10409	12403	16392	20381	28359
		RUN	7496						3473	4470	6464	8459	12448
		END	11530						3482	5477	9465	13454	21432
SYA150-18	B	START	21692							10588	14577	18566	26543
		RUN	8759							3207	5202	7196	11185
		END	13345							2241	6230	10218	18196
SYA150-18	C	START	25962								11950	15939	23917
		RUN	10483								3477	5472	9461
		END	15972								1960	5949	13926
SYA150-18	D	START	29900									13893	21871
		RUN	11979									3976	7965
		END	18018									2011	9989
SYA150-20	A	START	18454				10868	13357	15846	18334	23312	28289	38244
		RUN	7496				3702	4947	6191	7435	9924	12413	17390
		END	11530				3942	6430	8919	11407	16385	21362	31317
SYA150-20	B	START	21692					11542	14030	16519	21496	26474	36428
		RUN	8759					3684	4928	6173	8661	11150	16127
		END	13345					3194	5683	8172	13149	18126	28081
SYA150-20	C	START	25962							13892	18870	23847	33802
		RUN	10483							4448	6937	9426	14403
		END	15972							3902	8879	13856	23811
SYA150-20	D	START	29900								16823	21801	31755
		RUN	11979								5441	7930	12907
		END	18018								4942	9919	19874
SYA150-22	A	START	18454		9727	12763	15800	18837	21873	24910	30983	37056	
		RUN	7496		3132	4650	6168	7687	9205	10723	13760	16796	
		END	11530		2800	5837	8873	11910	14946	17983	24056	30129	
SYA150-22	B	START	21692			10948	13985	17021	20058	23094	29168	35241	
		RUN	8759			3387	4905	6424	7942	9460	12497	15534	
		END	13345			2601	5637	8674	11711	14747	20820	26894	
SYA150-22	C	START	25962					14395	17431	20468	26541	32614	44761
		RUN	10483					4700	6218	7736	10773	13809	19883
		END	15972					4404	7441	10477	16551	22624	34770
SYA150-22	D	START	29900						15385	18422	24495	30568	42715
		RUN	11979						4722	6240	9277	12314	18387
		END	18018						3503	6540	12613	18686	30833
SYA150-24	A	START	18456	10300	13938	17577	21215	24853	28492	32130	39407		
		RUN	7496	3418	5238	7057	8876	10695	12514	14333	17971		
		END	11530	3373	7012	10650	14288	17927	21565	25203	32480		
SYA150-24	B	START	21692		12123	15761	19400	23038	26676	30315	37591	44868	
		RUN	8759		3975	5794	7613	9432	11251	13070	18422	20347	
		END	13345		3776	7414	11052	14691	18329	21967	29244	36520	
SYA150-24	C	START	25962			13135	16773	20411	24050	27688	34965	42241	
		RUN	10483			4070	5889	7708	9527	11346	14985	18623	
		END	15972			3144	6783	10421	14059	17697	24974	32251	
SYA150-24	D	START	29900				14727	18365	22003	25642	32918	40195	
		RUN	11979				4393	6212	8031	9850	13489	17127	
		END	18018				2845	6483	10122	13760	21037	28313	
SYA150-28	A	START	18456	18487	23490	28493	33496	38499	43502				
		RUN	7496	7512	10013	12515	15016	17518	20019				
		END	11530	11561	16563	21566	26569	31572	36575				
SYA150-28	B	START	21692	16672	21675	26678	31681	36683	41686				
		RUN	8759	6249	8751	11252	13753	16255	18756				
		END	13345	8325	13328	18330	23333	28336	33339				
SYA150-28	C	START	25962	14045	19048	24051	29054	34057	39060	44062			
		RUN	10483	4525	7026	9528	12029	14531	17032	19533			
		END	15972	4055	9058	14061	19063	24066	29069	34072			
SYA150-28	D	START	29900		17002	22005	27008	32010	37013	42016			
		RUN	11979		5531	8032	10533	13035	15536	18038			
		END	18018		5120	10123	15126	20129	25132	30134			

SYA PNEUMATIC SCOTCH YOKE ACTUATOR

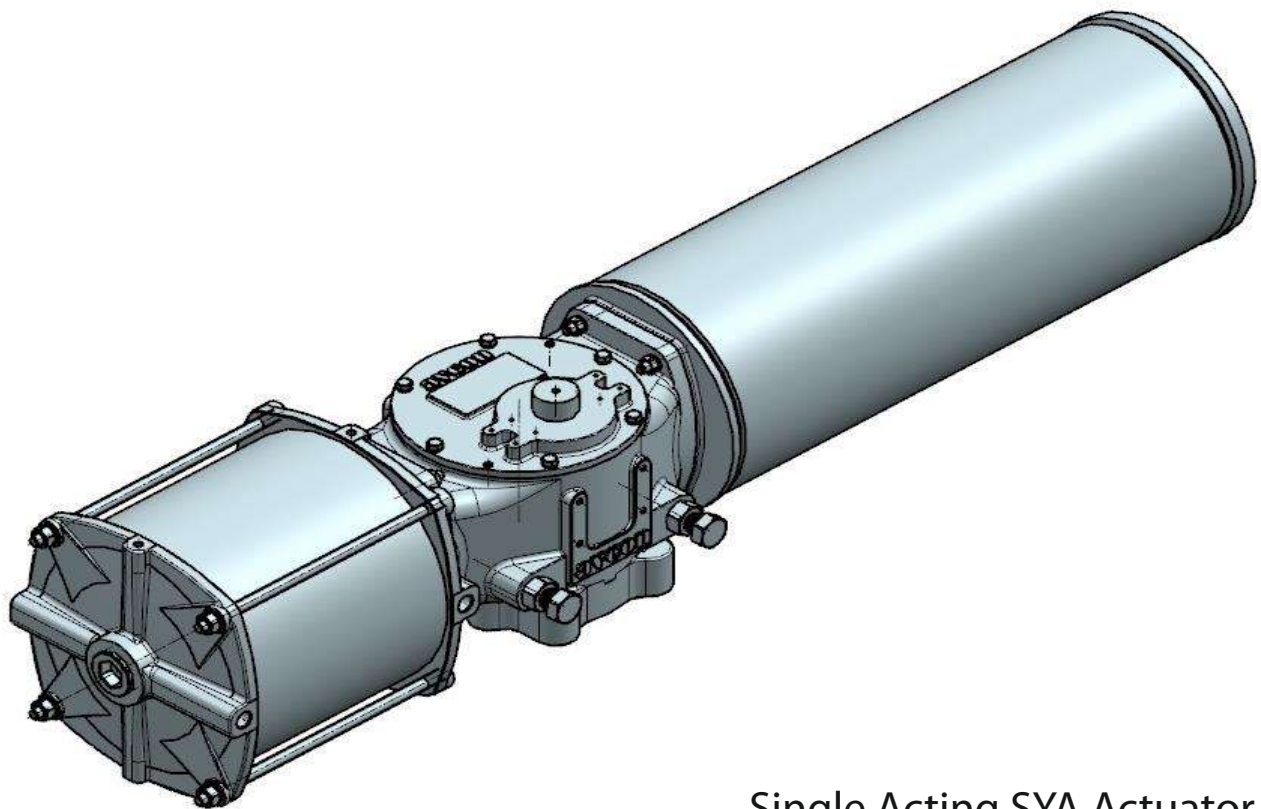
Ordering Code Logic														
How to Order														
SYA			100			250			DA		S	0	N	0
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0 - IF SPECIAL REQUIRMENTS														
SEALS N - NITRILE V - VITON S - SILICON														
YOKE TYPE S - SYMMETRIC														
SPRING TYPE A,B,C,D & IF DA-0														
ACTING TYPE DA - DOUBLE ACTING SR - SINGLE ACTING DD - DOUBLE CYLINDER														
CYLINDER SIZE 125, 150, 175, 200, 250, 300, 350,400 etc.														
YOKE SIZE 040,050,065,075,100,125,150 etc														
SERIES SYA - SCOTCH YOKE ACTUATOR														

For Example
DA - SYA100250DAS0N0
SR - SYA100250SRSA0

SYA PNEUMATIC SCOTCH YOKE ACTUATOR



Double Acting Double Cylinder SYA Actuator



Single Acting SYA Actuator

Industry we serve



PETROCHEMICAL INDUSTRY



PROCESS INDUSTRY

Compatible Solenoid Valves

R431E



R432E



R440E



R442E



R370E-R470E



R472E



R484E-R384E



R486E





Pioneer Spirit in Valve Automation

SINCE - 1969



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PUNE

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